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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,390	05/30/2006	Neil Russell Foster	HILLS1150	4759
28213 7590 07/24/2009 DLA PIPER LLP (US) 4365 EXECUTIVE DRIVE SUITE 1100 SAN DIEGO, CA 92121-2133				
EXAMINER				
ZALASKY, KATHERINE M				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,390

Applicant(s)

FOSTER ET AL.

Examiner

KATHERINE ZALASKY

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 13-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of group I in the reply filed on 25 June 2009 is acknowledged.
2. **Claims 13-25** are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Drawings

3. The drawings are objected to because:
 - Figure 2 shows the baffles, reference numeral 8, on the outside of the outer chamber; this is in direct contradiction with the claims and specification (pg 10/L28-31)
 - Figure 3 shows the spring with reference numeral 4 and the porous metal wall with reference numeral 6; however, the specification describes 6 as the spring and 4 as the porous metal wall (pg 10/L19-22)

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Interpretation

4. It is noted that **claims 1-12** are directed to an apparatus. Regarding limitations recited in **claims 1-12** which are directed to a manner of operating disclosed apparatus, it is noted that neither the manner of operating a disclosed device nor material or article worked upon further limit an apparatus claim. Said limitations do not differentiate apparatus claims from prior art. See MPEP § 2114 and 2115. Further, it has been held that process limitations do not have patentable weight in an apparatus claim. See *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969) that states "Expressions relating the apparatus to contents thereof and to an intended operation are of no significance in determining patentability of the apparatus claim."

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1-7, 9, 11 and 26** are rejected under 35 U.S.C. 102(b) as being anticipated by Cham (US 5,744,038).

Regarding **claim 1**, Cham discloses an apparatus for dissolving or suspending a substance in a solvent (abstract) comprising:

- an outer chamber (Figure 2, vessel 41, C5/L35-59)
- an inlet (Figure 2, tube 44, C5/L35-59)
- a porous chamber within the outer chamber (Figure 2, dispensing means 46, C5/L35-59), the porous chamber having a wall which allows passage of solvent and the substance dissolved or suspended in the solvent (Figure 2, C5/L35-59)
- an outlet for removing solvent and solution and/or dispersion from the outer chamber and a turbulence means for creating turbulence within the porous chamber (Figure 2, outlet 43, C5/L35-59, C5/L6-11)

Regarding **claim 2**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet in the outer chamber supplies solvent directly to a mouth communicating with the porous chamber (Figure 2, inlet 42, lower end 45, C5/L35-59).

Regarding **claim 3**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet is in the wall of the outer chamber (Figure 2, tube 44, inlet 42, lower end 45, C5/L35-59).

Regarding **claim 4**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet supplies solvent to

the porous chamber and the region between the porous chamber and the outer chamber (Figure 2, tube 44, inlet 42, lower end 45, C5/L35-59).

Regarding **claim 5**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the porous chamber is further provided with a longitudinally extending shaft communicating with the solvent inlet of the porous chamber (Figure 2, tube 44, inlet 42, lower end 45, C5/L35-59).

Regarding **claim 6**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the shaft is porous or perforated (Figure 2, tube 44, inlet 42, lower end 45, C5/L35-59, liquid is exiting the tube, must have at least one opening).

Regarding **claim 7**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the substance is in the porous chamber in the region around the longitudinally extending shaft (Figure 2, tube 44, inlet 42, lower end 45, C5/L35-59).

Regarding **claim 9**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the turbulence creating means includes a drive means to rotate the porous chamber within the outer chamber (Figure 2, rotating dispersing means 46, C5/L35-59).

Regarding **claim 11**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the porous chamber is provided with a plug to hold the substance against the base of the inner chamber

(Figure 2, rotating dispersing means 46, C5/L35-62, C4/L64-C5/L11, droplets only exit the chamber laterally, through the side wall, must have a solid bottom).

Regarding **claim 26**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses a method of treatment of the subject comprising the steps of administering to the subject an effective amount of particles of a biologically active substance produced using the apparatus of **claim 1** (C2/L4-27).

7. **Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Smith (US 6,540,914).**

Regarding **claim 1**, Smith discloses an apparatus (abstract) comprising:

- an outer chamber (Figure 2, Figure 11, canister 10)
- an inlet (Figure 2, Figure 11, inlet orifices 46, 246)
- a porous chamber within the outer chamber, the porous chamber having a wall which allows passage of solvent and the substance dissolved or suspended in the solvent (Figure 2, Figure 11, filter element 12, 212)
- an outlet for removing solvent and solution and/or dispersion from the outer chamber and a turbulence means for creating turbulence within the porous chamber (Figure 2, Figure 11, fluid outlet aperture 44, bearing mounts 228, bearing 226, snap ring 224, C8/L18-29, L52-67)

8. **Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hammonds (US 6,531,056).**

Regarding **claim 1**, Hammonds discloses an apparatus (abstract) comprising:

- an outer chamber (Figure 6, housing 12, housing cavity 18)

- an inlet (Figure 6, inlet 36)
- a porous chamber within the outer chamber, the porous chamber having a wall which allows passage of solvent and the substance dissolved or suspended in the solvent (Figure 6, container 20, radial discharge holes 34)
- an outlet for removing solvent and solution and/or dispersion from the outer chamber and a turbulence means for creating turbulence within the porous chamber (Figure 6, outlet 38, magnetic stir bar 42, motor 50, C7/L31-64)

Regarding **claim 8**, Hammonds discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the turbulence creating means includes a drive means to drive a magnetic stirrer within the porous chamber (Figure 6, magnetic stir bar 42, motor 50, C7/L31-64).

9. **Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Dutton et al. (US 4,957,708).**

Regarding **claim 1**, Dutton et al. discloses an apparatus (abstract) comprising:

- an outer chamber (Figure, vessel 10)
- an inlet (Figure, inlet 48, C2/L45-49)
- a porous chamber within the outer chamber, the porous chamber having a wall which allows passage of solvent and the substance dissolved or suspended in the solvent (Figure, wall 36, wall 40, bottom wall 46, vertical slots 58)

- an outlet for removing solvent and solution and/or dispersion from the outer chamber and a turbulence means for creating turbulence within the porous chamber (Figure, outlet 22, agitator 66)

Regarding **claim 2**, Dutton et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet in the outer chamber supplies solvent directly to a mouth communicating with the porous chamber (Figure, inlet 48, C2/L45-49).

Regarding **claim 3**, Dutton et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet is in the wall of the outer chamber (Figure, inlet 48, C2/L45-49).

Regarding **claim 4**, Dutton et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet supplies solvent to the porous chamber and the region between the porous chamber and the outer chamber (Figure, inlet 48, C2/L45-49).

Regarding **claim 5**, Dutton et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the porous chamber is further provided with a longitudinally extending shaft communicating with the solvent inlet of the porous chamber (Figure, inlet 48, C2/L45-49).

Regarding **claim 6**, Dutton et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the shaft is porous or perforated (Figure, inlet 48, C2/L45-49, fluid exits into the chamber, must have at least one opening).

Regarding **claim 7**, Dutton et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the substance is in the porous chamber in the region around the longitudinally extending shaft (Figure, inlet 48, C2/L45-49).

Claim Rejections - 35 USC § 103

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. **Claims 10-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US 6,540,914), as applied to **claim 1** above.

Regarding **claims 10-12**, Smith discloses all of the claim limitations as set forth above. Smith also discloses that wherein the turbulence creating means further comprises baffles within the outer chamber in the region between the porous chamber and the wall of the outer chamber (Figure 2, rubber baffle 62, C4/L53-59). Moreover, the reference discloses that the porous chamber is provided with a plug to hold the substance against the base of the inner chamber and that the plug is a planar element abutting the sides of the inner chamber and is held against the substance by a resilient biasing means (Figure 2, valve plate 94, valve spring 98, support plate 88, C6/L31-38). However, the reference discloses all of the above elements in a different embodiment. However, the second embodiment, which discloses the rotating filter chamber, does disclose that the remainder of the second embodiment may preferably be as previously described (C9/L1-2). Therefore, it would have been obvious to one having ordinary skill in the art to look to the previously presented embodiments in Smith to finish assembling the apparatus.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATHERINE ZALASKY whose telephone number is (571) 270-7064. The examiner can normally be reached on Monday-Thursday, 7:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571)272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Krishnan S Menon/
Primary Examiner, Art Unit 1797

/KZ/
20 July 2009